## Listing of the Claims

- 1. (Currently Amended) An MRI apparatus that includes a magnet system for generating a  $B_0$  magnetic field in an examination zone (12)-between poles-(14,16), the apparatus comprising:
- a first, planar resonator (22)-disposed between one of the pole pieces (14,16) and the examination zone-(12), arranged substantially in a first common plane;
- a first RF screen (26) disposed between the first pole piece and the first resonator (22).
- 2. (Currently Amended) The MRI apparatus as set forth in claim 1, further including:
- a first gradient coil system (18) disposed between the first RF screen and the first pole piece.
- 3. (Currently Amended) The MRI apparatus as set forth in claim 1, further including:
- a second, planar resonator (24) disposed between the remaining one of the pole pieces (14,16) and the examination zone (12), arranged substantially in a second common plane;
- a second RF screen (28)-disposed between the second pole piece and the second resonator-(24); and
- a second gradient coil system (20)-disposed between the second RF screen and the remaining pole piece.
- 4. (Currently Amended) The MRI apparatus as set forth in claim 2, wherein the first resonator (22) includes:
  - a first circular plate-(30);
  - a first circular conducting ring (32) surrounding the first circular plate; and
- a first plurality of capacitors (34) arranged radially around the first circular plate, connecting the first circular plate to the first circular ring.

- 5. (Currently Amended) The MRI apparatus as set forth in claim 4, wherein the second resonator (24)-includes:
  - a second circular plate-(30);
  - a second circular conducting ring (32)-surrounding the second circular plate; and
- a second plurality of capacitors (34) arranged radially around the second circular plate, connecting the second circular plate to the second circular conducting ring.
- 6. (Currently Amended) The MRI apparatus as set forth in claim 5, wherein each of the first and second RF screens (26,28) is larger in diameter than the respective resonator-(22,24).
- 7. (Currently Amended) The MRI apparatus as set forth in claim 5, wherein said first and second plurality of capacitors (34)-are PCB capacitors.
- 8. (Currently Amended) The MRI apparatus as set forth in claim 2, wherein the first resonator (22) includes:
  - a first conductor (30);
  - a first conducting ring (32) surrounding the first conductor; and
- a first plurality of capacitors (34) arranged radially around the first conductor, connecting the first conductor to the first conducting ring.
- 9. (Currently Amended) The MRI apparatus as set forth in claim 2, wherein the first resonator (22) includes:
  - a first ring or plate-(30);
  - a first conducting ring (32) surrounding the first ring or plate; and
- a first plurality of capacitors (34) arranged radially around the first ring or plate, connecting the first ring or plate to the first conducting ring.
- 10. (Original) The MRI apparatus as set forth in claim 2, wherein the  $B_0$  magnetic field is a vertical field.

11. (Currently Amended) The MRI system as set forth in claim 4, further including:

sequence control means (40) for controlling a gradient control (41b) and RF transmitter (41a) to induce spatially encoded magnetic resonance signals in the examination zone;

receiving means (42) for receiving and demodulating magnetic resonance signals received from the first planar resonator-(22);

reconstruction means (44) for reconstructing the demodulated magnetic resonance signals into at least one image representation;

memory means (46) for storing image data of the at least one image representation; image processing means (48) for performing image and volumetric analysis of the image data, and creating analysis data;

video processing means (50)-for converting the image data and analysis data into an appropriate format for display; and

display means (52) for displaying the converted image data and the converted analysis data.

- 12. (Original) A planar resonator for use in the MRI apparatus of claim 1.
- 13. (Currently Amended) A resonator for an open MRI system, the resonator comprising:

a round, central conductor (30);

an annular ring (32)-surrounding and in the same plane as the central conductor (30);

a plurality of rungs (33) arranged radially between the central conductor (30) and the annular ring (32) and in the same plane as the central conductor and the annular ring; and

a plurality of capacitors (34) disposed in the rungs.

14. (Currently Amended) The resonator as set forth in claim 13, wherein the central conductor (30) is a plate.

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- 15. (Currently Amended) The resonator as set forth in claim 13, wherein the central conductor (30)-is circular.
- 16. (Currently Amended) The resonator as set forth in claim 13, wherein the plurality of capacitors (34)-includes at least 1000 capacitors.
- 17. (Currently Amended) A method of reducing a stray field in an open MRI apparatus with a resonator (22)-adjacent a pole (14)-and an RF screen (26)-between the resonator and the pole, the method comprising:

mounting a planar central conductor (30)-of the resonator adjacent and displaced from the RF screen;

mounting an annular ring (32) surrounding the central conductor; connecting the central conductor to the annular ring with a plurality of `capacitors (34) arranged radially.

- 18. (Original) The method as set forth in claim 17, wherein the planar central conductor is a plate.
- 19. (Original) The method as set forth in claim 17, wherein the plurality of capacitors is a maximal number of capacitors.
- 20. (Original) The method as set forth in claim 17, wherein the distance between the RF screen and the resonator is maximized.